Policy Implications of the Computed Tomography (CT) Scanner: An Update

January 1981

NTIS order #PB81-163917

POLICY IMPLICATIONS OF THE COMPUTED TOMOGRAPHY (CT) SCANNER: AN UPDATE

BACKGROUND PAPER

Inhairy 2NS



'Library of Congress Catalog Card Number 81-600006

For sale by the Superintendent of Documents, U.S. Government Printing Office Washington, D.C. 20402

5 8

Foreword

In August 1978, OTA published a report called *Policy Implications of the Computed Tomography (CT) Scanner*. The report has generated much interest in both the CT scanner itself and Federal policies aimed at rationalizing its diffusion and use. During the summer of 1979, OTA staff reviewed the status of policies concerning the scanner and found that they were very much in the process of change. A number of staff of congressional committees (especially the Senate Committee on Finance, which had requested the original study) expressed interest in an update of material in the original report. In addition, OTA continued to be consulted by outside organizations and groups, including Federal and State government agencies, on implications of CT scanners, For these reasons, OTA decided to update the 1978 report.

This paper does not repeat material in the original report. For the most part, it is assumed that the reader is familiar with the 1978 report. Thus, basic descriptions of the scanner and of certain Federal laws and policies are found in the earlier report.

As part of this paper, OTA has updated its list of operational CT scanners. The OTA list apparently continues to be the most complete and reliable inventory of scanners. An analysis of data from the list is presented in chapter 2.

This paper considers the CT scanner in the context of the entire field of what has come to be called "diagnostic imaging" (making pictures of the inside of the human body for the purposes of diagnosis). A number of new applications of existing technologies as well as several new technologies have developed. The field of diagnostic imaging is developing rapidly, and presents a significant challenge to policy makers. Can the relative advantages of the different technologies be demonstrated? Can Federal policies rationalize the use of the many technologies? Or will the new technologies merely be added on to the existing methods, driving up costs and contributing only a small marginal benefit to people's health?

Since this is a background paper, no policy options are presented. The purpose of this paper is to summarize the most important development concerning CT scanners that have occurred over the past 21/2 years. However, since the policy options of the 1978 report seem generally valid, they are reprinted in appendix A.

Drafts of the final paper were reviewed by the Health Program Advisory Committee chaired by Dr. Sidney Lee and by a number of other individuals and groups representing manufacturers, radiologists, and Federal agencies (see app. I). We are grateful for their assistance.

JOHN H. GIBBONS

Director

Health Program Advisory Committee

Sidney S. Lee, Chairman
Associate Dean, Community Medicine, McGill University

Stuart H. Altman

Dean

Florence Heller School

Brandeis University

Robert M. Ball
Senior Scholar
institute of Medicine
National Academy of Sciences

Lewis H. Butler

Health Policy Program

School of Medicine

University of California, San Francisco

Kurt Deuschle

Professor of Community Medicine

Mount Sinai School of Medicine

Zita Fearon

Consumer Commission on the Accreditation

of Health Services, Inc.

Rashi Fein

Professor of the Economics of Medicine
Center for Community Health and
Medical Care
Harvard Medical School

Melvin A. Glasser

Director

Social Security Department

United Auto Workers

Mark Lepper
Vice President for Inter-Institutional Affairs
Rush-Presbyterian Medical School
St. Luke's Medical Center

C. Frederick Mosteller
Professor and Chairman
Department of Biostatistics
Harvard University
School of Public Health

Beverlee Myers
Director
Department of Health Services
State of California

Mitchell Rabkin General Director Beth Israel Hospital

Frederick C. Robbins

President

institute of Medicine

Kerr L. White Rockefeller Foundation

Computed Tomography Scanner Project Staff

Joyce C. Lashof, Assistant Director-, OTA Health and Life Sciences Division

H. David Banta, Health Program Manager

Karen Kohlhof, Co-Project *Director* H. David Banta, *Co-Project Director*

Chester Strobel, Research Associate
John Bell, Computer Programer
Kerry Britten Kemp, * Editor- and Writer
Virginia Cwalina, Administrative Assistant
Shirley Ann Gayheart, Secretary
Nancy L. Kenney, Secretary

Publishing Staff

John C. Holmes, Publishing Officer

John Bergling* Kathie S. Boss Debra M. Datcher Patricia A. Dyson*